

1. Claims 1, 2, 4-7 and 9-12 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Mayeux (U.S. Patent No. 5,390,040) in view of Korevaar (U.S. Patent No. 6,490,066) and Fischer *et al.* (U.S. Patent No. 6,091, 529). Applicant traverses the § 103(a) rejection of 1, 2, 4-7 and 9-12 for at least the reasons discussed below.

The Patent Office alleges that Mayeux teaches a receiving reflecting surface, referring to a steering mirror 10 shown in Fig. 2. The Patent Office further alleges that Mayeux teaches an aperture for outputting the light to be transmitted, said single aperture extending near to the outer edge of the receiving surface.

In Mayeux, the transmitter consists of a number of laser assemblies arranged around the periphery of a telescope. Each laser assembly consists of a laser diode 50. The transmitted beam 200 is collimated by a collimating lens 52 and then directed onto a region of the steering mirror 10.

The Patent Office has agreed that Mayeux fails to teach or suggest the receiving surface defining an outer edge. However, the Patent Office alleges that Korevaar discloses a laser/microwave transmitter communication system that uses a single aperture that extends to an outer edge, referring to an aperture 20 of Fig. 2A; col. 4, lines 30-40 and col. 5, lines 42-60 of Korevaar. Applicant respectfully disagrees.

First, Korevaar is an improper §103 reference of the present application. Applicant states in the Background of the Invention section of the present application that U.S. Patent No. 5,777,768, which uses a plurality of laser transmitters distributed around a receiving telescope to solve the scintillation problem, is not favorable because all transmitting telescopes must be

separately aligned and pointed at the receiver. According to the present application, the solution of U.S. Patent No. 5,777,768 leads to a long, inconvenient and costly waste of time for the alignment during installation and to the need for expensive materials (Specification, page 3, second full paragraph). The purpose of the present application is to provide a solution to solve the scintillation problem without the deficiencies of the prior art (Specification, page 4, first full paragraph).

However, as shown in Fig. 1 of Korevaar, each transceiver 12 has a plurality of laser transmitters 14 that are mounted on a housing 16 (Korevaar, col. 4, lines 32-34). Korevaar's solution is exactly the type of solution to the scintillation problem that is discussed in the background section of the present application, which is distinguishable from the present invention recited in independent claims 1 and 7. Accordingly, Korevaar teaches away from the claimed invention and is not a proper § 103(a) reference of the present application.

The Patent Office acknowledges that Mayeux fails to teach or suggests the use of coherent light. However, the Patent Office cites Fischer *et al.* as disclosing the use of coherent light.

The combination of Mayeux, Korevaar and Fischer *et al.* fails to teach or suggest several features of the present invention as recited in independent claims 1 and 7. For example, as shown in Fig. 2 of Mayeux, both the laser diode 50 and the collimating lens 52 are placed considerably away from the steering mirror 10. Thus, the combination of Mayeux, Korevaar and Fischer *et al.* fails to teach or suggest an aperture extending near to the outer edge of the receiving surface. In addition, the aperture 20 referred to by the Patent Office is for receiving

communication data (Korevaar, col. 4, lines 38-41; and col. 5, lines 48-51). However, independent claims 1 and 7 of the present invention recite that aperture is for outputting the coherent light to be transmitted.

Moreover, there is no suggestion or motivation to combine Mayeux, Korevaar and Fischer *et al.* The purpose of Mayeux is to provide low power, low weight and low cost optical communication systems. However, the purpose of Korevaar is to improve reliability of laser data link by a hybrid system that switches to microwave mode from laser mode in haze, fog or heavy snow conditions. Given the different goals of the two references and difference problems solved by the references, there is no suggestion or motivation for a skilled artisan to combine them. Fischer *et al.* fail to overcome any of the above-discussed deficiencies of Mayeux and Korevaar, and thus, one of skill in the art would not be motivated to combine Fischer *et al.* with Mayeux and Korevaar.


Accordingly, Applicant respectfully submits that independent claims 1 and 7 are allowable over the combination of Mayeux, Korevaar and Fischer *et al.* Applicant further submits that claims 2, 4-7 and 9-12 are allowable as well, at least by virtue of their dependency from claims 1 and 7, respectively. Applicant respectfully requests that the Patent Office reconsider and withdraw the 35 U.S.C. § 103(a) rejection of claims 1, 2, 4-7 and 9-12.

RESPONSE UNDER 37 C.F.R. § 1.111  
U.S. APPLICATION NO. 09/881,722  
ATTORNEY DOCKET NO. 64988

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Paul J. Wilson  
Registration No. 45,879

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: August 2, 2005